



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

5010169

D5359-041
Job Sheet 165812



Part No: D5359-041

Job Qty: 2 ea

Part Name: Strut Assembly, LH/RH



Part Weight: 0 lbs

Status: Production

Priority: Medium

Job Created: 9/30/17

Job Tracking No:

Due Date: 10/31/17

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV B SHEETS 1,2,3 IPP Rev: A RQ 16.03.23 Verified by: DD IPP REV:B 17.01.20 AS PER REV.B DD VERF:JLM

Ship Via:

Bill of Materials

Part/Part Name	Part Note	Serial No	Quantity	Location
D5359-041 Strut Assembly, LH/RH	DWG REV B SHEETS 1,2,3 IPP Rev: A RQ 16.03.23 Verified by: DD IPP REV:B 17.01.20 AS PER REV.B DD VERF:JLM		0.000	
AN3CH11A Bolt (Drilled Head)			0.000	
AN3CH12A Bolt (Drilled Head)			0.000	
D2690-6 Lanyard	DWG REV B2 IPP: C C 03.04.04 Reformat; Incorporated D2690-X KJ/RF		0.000	
D5359-3 Insert	DWG REV B IPP REV:A NEW ISSUE 17-01-20 JLM VERIFIED BY:DD		0.000	
D5359-5 Clevis, Aircraft End	DWG REV B IPP REV:A NEW ISSUE 17-01-20 JLM VERIFIED BY:DD		0.000	
D5359-7 Clevis, Basket End	DWG REV B IPP REV:A NEW ISSUE 17-01-20 JLM VERIFIED BY:DD		0.000	
M304TS0.750W.049 304 Sq Tube .75X.75X.049W			0.000	
MS17984-C405 Pin, Quick Release				
MS17984-C608 Pin, Quick Release				
MS21043-3 Nut				
NAS1149C0363R Washer				
NAS509-6C Nut				

Status: Stock

Part: **D5359-041 B165812**

Created: 9/30/17 1:17 PM DART.LAJEUNESSE.MARIE



Serial No: **S000238**

Printed By: Goldston, Justin 10/2/17 10:45 AM

Job Routing

Op No	Operation	Qty	Due Date	Standard		Workcenter/Supplier	
				Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time
90	Start up Operation	2 Ea	10/30/17	0.00	0.00	Start up container	
180	Small Fab	2 pcs	10/30/17	0.00	1.79	Small Fab	
210	Small Fab	2 pcs	10/31/17	0.00	1.79	Small Fab	
220	QC	2 pcs	10/31/17	0.00	0.00	QC5	
230	Packaging	2 pcs	10/31/17	0.00	0.00	Packaging3	
240	QC21-SA	2 Ea	10/31/17	0.00	0.00	QC21	

DART
AEROSPACE
S010169

Dart Aerospace Ltd.

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Hawkesbury, ON K64 1K7
CANADA
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www.dartaerospace.com



Strut Assembly, LH/RH

PART NO: D5359-041

Revision:

Operation: Small Fab

Change No:

Mfg Date: 11/15/17

Job No: 165812

244
16
88-2

Job BOM

Part / Item	Component Name	Quantity	Operation	Special Comments
D5359-041 B165812		4 Ea (2 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D5359-041 B165812	4	2	0	0

Part Specifications

Specifications could not be found.

Plex 10/1/17 1:40 PM Dart.Renwick.Jennifer

Work Order Summary

Thursday, September 28, 2017 8:06:53 AM

Page 1 of 3

Criteria : Work Order ID: 165812 Item ID: D5359-041 Product Family SMALL FAB
Work Order Start Dates 9/13/2017 to 9/13/2017 11:59:59 PM Work Order Required Dates 9/18/2017 to 9/18/2017 11:59:59 PM
All References
Work Order Status Released

Work Order ID	165812	Required Qty	2.0000	Status Code	Released
Item ID	D5359-041	Accepted Qty	1.0000	Scrap Qty	0.0000
Item Name	Strut Assembly, LH/RH				
Current Acct Value	\$767.122				
Start Date	9/13/2017	Required Date	9/18/2017	Completed Date	
Standard	** Actual **	** Acct. Value **	** Variance **	** Variance % **	
Direct Costs	Total	Each	Each	Each	Each
Material	\$154.276	\$154.276	\$76.986	(\$77.290)	-100.39%
Labor	\$467.320	\$467.320	\$207.747	(\$259.573)	-124.95%
Outplant	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
Variable Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
Fixed Burden	\$1,176.238	\$1,176.238	\$482.389	(\$693.849)	-143.84%
Material Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
** Total **	\$1,797.833	\$1,797.833	\$767.122	(\$1,030.712)	

Item ID/Item Name	Required Qty	Issue Code	Issue Date	Issued Qty	Cost Amount
AN3CH11A Bolt (Drilled Head)	4.0000		9/21/2017	4.0000	\$13.500
AN3CH12A Bolt (Drilled Head)	4.0000		9/21/2017	4.0000	\$8.240
D2690-6 Lanyard	4.0000		9/21/2017	4.0000	\$21.761
D5359-3 Insert	4.0000		9/21/2017	4.0000	\$493.597
D5359-5 Clevis, Aircraft End	2.0000		9/21/2017	2.0000	\$447.216
D5359-7 Clevis, Basket End	2.0000		9/21/2017	2.0000	\$246.103
M304TS0.750W.049 304 SQ Tube .75x.75x.049W	6.6680		8/30/2017	6.7000	\$19.302
MS17984-C405 Pin, Quick Release	2.0000		9/21/2017	2.0000	\$20.180
MS17984-C608 Pin, Quick Release	2.0000		9/21/2017	2.0000	\$50.000
MS21043-3 Nut	8.0000		9/21/2017	8.0000	\$2.411

NAS1149C0363R

Washer

20.0000

9/21/2017

20.0000

\$1.084

NAS509-6C

Nut

4.0000

9/21/2017

4.0000

\$22.000

Total Matl Amts:

\$1,345.394

Work Center CNC Bend 1

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
whit01												
9/18/2017												
112			0.00	0.00	1.01	1.01	1.00	\$0.000	\$19.046	\$55.569	\$0.000	\$74.615
Total:			0.00	0.00	1.01	1.01	1.00	\$0.000	\$19.046	\$55.569	\$0.000	\$74.615

Work Center Mill Conv

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
char03												
9/19/2017												
130			0.00	0.00	1.65	1.65	1.00	\$0.000	\$31.067	\$90.640	\$0.000	\$121.707
9/21/2017												
190			0.00	0.00	0.96	0.96	1.00	\$0.000	\$18.027	\$52.596	\$0.000	\$70.623
Total:			0.00	0.00	2.61	2.61	2.00	\$0.000	\$49.094	\$143.235	\$0.000	\$192.330

Work Center Powdercoat

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
ROQU01												
9/21/2017												
160			0.00	0.00	0.34	0.11	3.00	\$0.000	\$2.500	\$6.241	\$0.000	\$8.741
Total:			0.00	0.00	0.34	0.11	3.00	\$0.000	\$2.500	\$6.241	\$0.000	\$8.741

Work Center Small Fab

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
BOUC01												
9/21/2017												
180			0.00	0.00	0.58	0.58	1.00	\$0.000	\$12.039	\$32.216	\$0.000	\$44.255

210		0.00	0.00	0.25	0.25	1.00	\$0.000	\$5.160	\$13.808	\$0.000	\$18.968
GAUT02	9/19/2017										
114		0.00	0.00	0.99	0.99	1.00	\$0.000	\$20.514	\$54.893	\$0.000	\$75.407
LERO01	8/30/2017										
110		0.00	0.00	0.50	0.50	1.00	\$0.000	\$10.372	\$27.753	\$0.000	\$38.125
Total:		0.00	0.00	2.33	2.33	4.00	\$0.000	\$48.085	\$128.669	\$0.000	\$176.754

Work Order ID 165812-2

165812

Page 1

Tuesday, August 29, 2017 3:21:20 PM

Item ID: D5359-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Strut Assembly, LH/RH

Start Date: 9/13/2017 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 9/18/2017 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: W Date: AUG 30 2017 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D5359	B

110 0.00
110
Small Fab Memo 1.13
Small Fab 1- CUT SQUARE TUBING AT 48.00"

2 ~~Ø~~ AUG 30 2017 19 09

112 0.00
112
CNC Bend 1 Memo 0.02
CNC Delta 100 Bender 1- FORM TUBING AS PER DWG USING DT10300 USING CNC BENDER 100 AND FOLIO 32 BEND PROG D5359.

2 ~~Ø~~ 17.09-18

114 0.00
114
Small Fab Memo 0.02
Small Fab 1- TRIM OFF EXTRA MATERIAL USING DT10300
2- DEBURR

2x ~~Ø~~ 2017-09-19

Work Order ID 165812

Tuesday, August 29, 2017 3:21:20 PM

165812

Page 3

Item ID: D5359-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Strut Assembly, LH/RH

Start Date: 9/13/2017 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 9/18/2017 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.02				<u>2</u>	<u>0</u>		DAS 44 3-29-17-09-20
160 *160* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel <i>M 138014</i> Memo START TIME: <u>7:45</u> OVEN TEMPERATURE: <u>400</u> FINISH TIME: <u>8:15</u>	0.00 0.30				<u>2</u>	<u>0</u>	<u>1709-21</u>	<i>115</i>
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.02							SFD 2 11 2017

Tuesday, August 29, 2017 3:21:20 PM

Page 4

[illegible]

Tuesday, August 29, 2017 3:21:20 PM

Page 5

[illegible]

Work Order ID 165812

Tuesday, August 29, 2017 3:21:20 PM

165812

Page 6

Item ID: D5359-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Strut Assembly, LH/RH

Start Date: 9/13/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/18/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

240

QC21- Final Inspection - Work Order Release

0.00

240

QC

Memo

0.10

Quality Control

Picklist Print

Tuesday, August 29, 2017 3:21:19 PM

Page 2

Work Order ID: 165812

165812

Parent Item: D5359-041

D5359-041

Parent Item Name: Strut Assembly, LH/RH

Start Date: 9/13/2017

Required Date: 9/18/2017

Start Qty: 1.00

Required Qty: 1.00

D5359-7

Manufactured

No

210

Each

2.0000

D5359-7

Clevis, Basket End

1
** B157113

SEP 21 2017

Location

Loc Qty

Loc Code

GA

2

157113

2

AN3CH11A

Purchased

No

180

Each

20.0000

AN3CH11A

Bolt (Drilled Head)

2
** 24

SEP 21 2017

Location

Loc Qty

Loc Code

ST349

20

m137847

20

AN3CH12A

Purchased

No

180

Each

24.0000

AN3CH12A

Bolt (Drilled Head)

2
** 4

SEP 21 2017

Location

Loc Qty

Loc Code

GA

24

m136412

16

m137361

8

MS17984-C405

Purchased

No

210

Each

6.0000

MS17984-C405

Pin, Quick Release

1
** 4

SEP 21 2017

Location

Loc Qty

Loc Code

over005

4

m138336

4

ST315

2

m137963

2

2

Picklist Print

Tuesday, August 29, 2017 3:21:20 PM

Page 3

Work Order ID: 165812

165812

Parent Item: D5359-041

D5359-041

Parent Item Name: Strut Assembly, LH/RH

Start Date: 9/13/2017

Required Date: 9/18/2017

Start Qty: 1.00

Required Qty: 1.00

MS17984-C608

Purchased

No

210

Each

2.0000

1

+1

MS17984-C608

Pin, Quick Release

**

SEP 21 2017

DAS

9-29

Location

Loc Qty

Loc Code

ST314

2

m137099

2

MS21043-3

Purchased

No

180

Each

758.0000

4

48

MS21043-3

Nut

**

SEP 21 2017

DAS

9-29

Location

Loc Qty

Loc Code

FG

80

103691

80

FP001

96

m136182

96

GA

45

m136182

45

ST302

537

m137587

37

m138040

500

NAS1149C0363R

Purchased

No

180

Each

318.0000

10

20

NAS1149C0363R

Washer

**

SEP 21 2017

DAS

9-29

Location

Loc Qty

Loc Code

266

48

m137495

48

FP001

64

m133077

64

GA

6

m133077

6

ST266

200

m138326

200

Tuesday, August 29, 2017 3:21:20 PM

Shop Packet Print

Page 3

Picklist Print

Tuesday, August 29, 2017 3:21:20 PM

Page 4

Work Order ID: 165812

165812

Parent Item: D5359-041

D5359-041

Parent Item Name: Strut Assembly, LH/RH

Start Date: 9/13/2017

Required Date: 9/18/2017

Start Qty: 1.00

Required Qty: 1.00

NAS509-6C

Purchased

No

210

Each

11.0000

2

24

NAS509-6C

**

Nut

Location

Loc Qty

Loc Code

SEP 21 2017

ST551

11

~~M128429~~

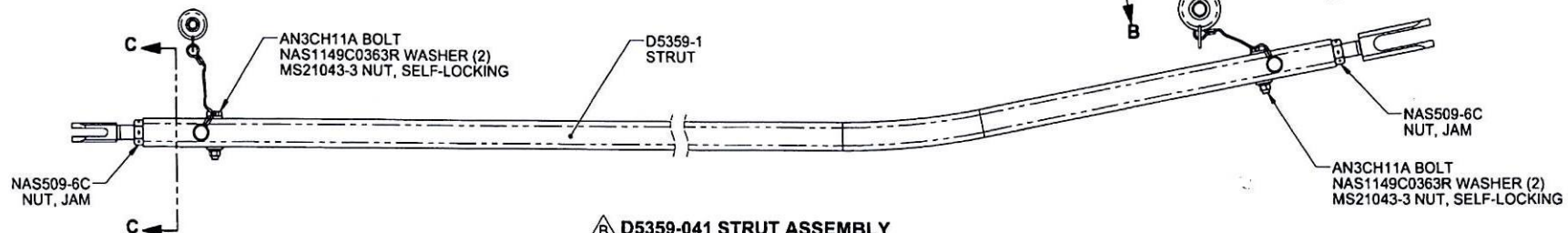
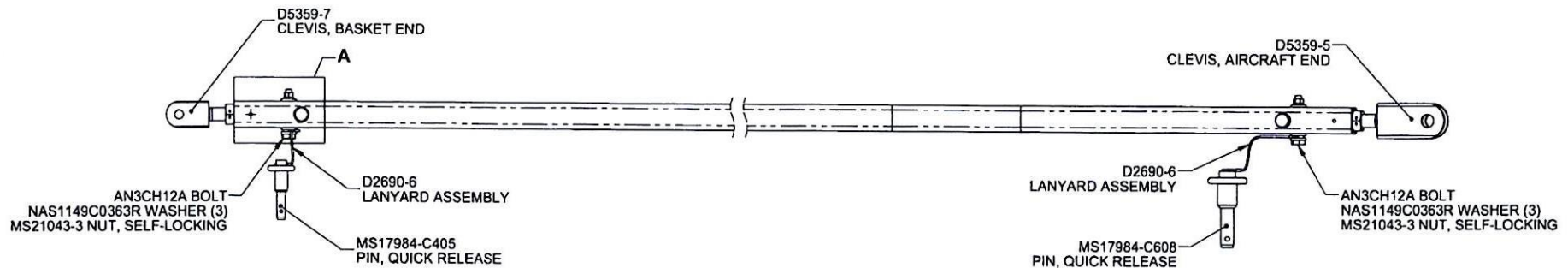
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FM

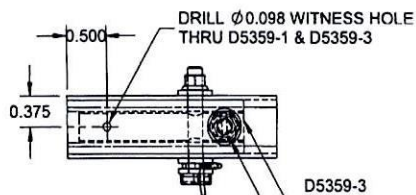
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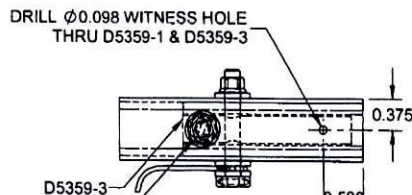
2
2



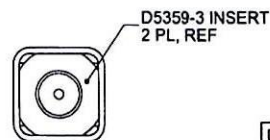
D5359-041 STRUT ASSEMBLY



DETAIL A
SCALE 2X



VIEW B-B
SCALE 2X
ROTATED 11° CW



SECTION C-C
SCALE 3X

RELEASED
2017-02-10

APPROVED

DESIGN	VS	DART AEROSPACE LTD	
DRAWN	NO	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. B
MFG. APPR.	DD	D5359	SHEET 2 OF 4
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	STRUT ASSEMBLY	NTS
DATE	16.12.12	COPYRIGHT © 2015 BY DART AEROSPACE LTD	
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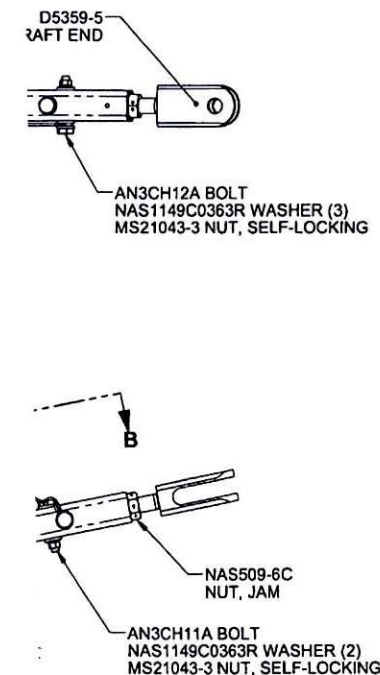
LESS OTHERWISE NOTED
NOTED

QSI 044 6.1

6173E GRADE 2
JND ON THREAD



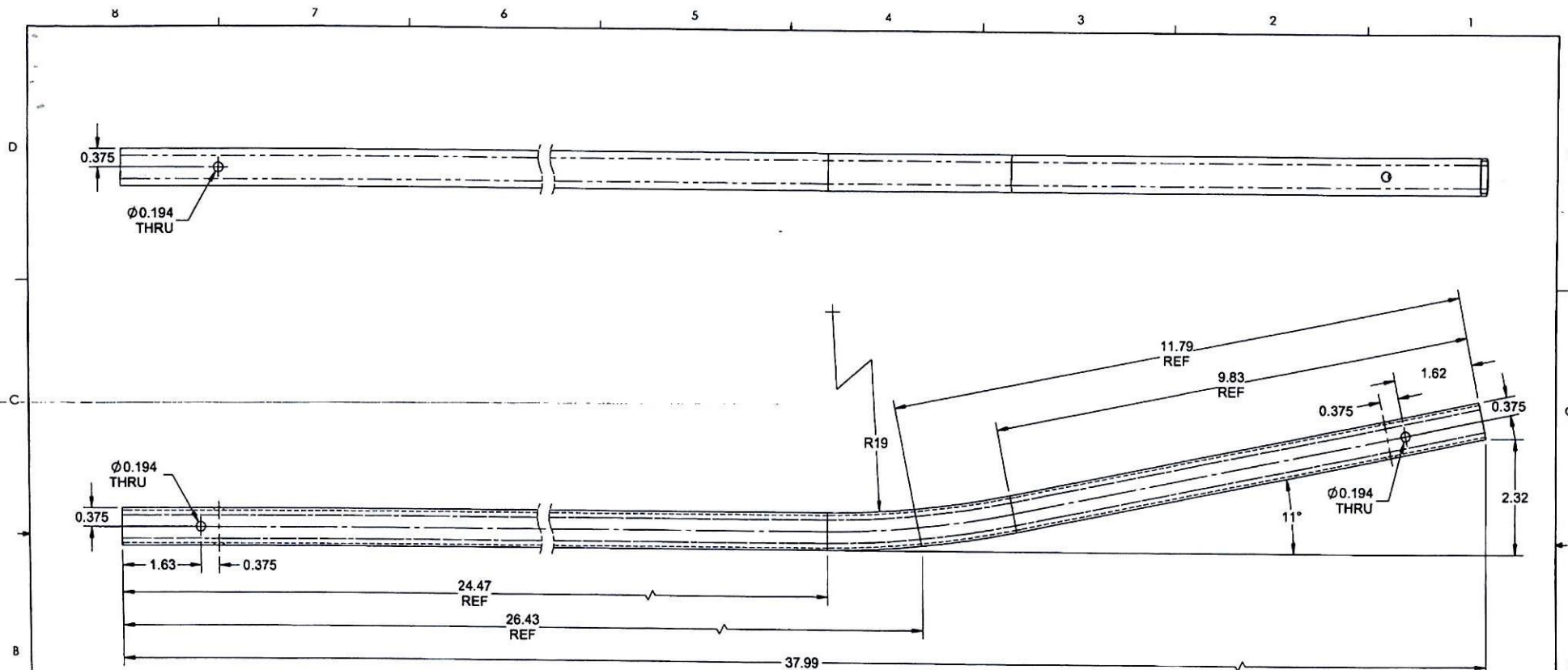
B	REDESIGNED TO BE COMPATIBLE WITH BOTH LH + RH INSTALLATIONS. -042 DELETED.		AJS	16.12.12
A	NEW ISSUE		VS	15.11.23
REV.		DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	NO			
CHECKED	AJS	DRAWING NO.	REV. B	
MFG. APPR.	DD	D5359	SHEET 1 OF 1	
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DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

AWING NO.	REV. B
5359	SHEET 2 OF 4
LE	SCALE
TRUT ASSEMBLY	NTS

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B D5359-1 STRUT

NOTES:

- 1) MATERIAL: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
REF DART SPEC M304TS0.750W.049
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.40 lbs
- 8) FLAT LENGTH 38.21 REF

RELEASED
2017-02-10

APPROVED

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CHECKED	AJS	DRAWING NO.	REV. B
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